

What is claimed is:

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1 Process for the MPEG type video coding of high definition images, an image being split into panels, an encoder being assigned to each panel, one or more panels constituting, over the length of the image, a horizontal band of the image, wherein a global regulation, at the level of a band, is implemented as a function of a preset bit rate for the band and on the basis of a single Video Buffering Verifier (VBV) taking into account the state of the buffer memories of the encoders of the band.

2 Process according to Claim 1, wherein the preset bit rate allocated to a horizontal band is dependent on the cost of coding the band relative to the cost of coding a complete image.

3 Process according to Claim 2, wherein the coding cost is calculated on the basis of a preanalysis of the image.

4 Process according to Claim 2, wherein the coding cost is calculated on the basis of the cost of coding or complexity of a previous image.

5 Process according to Claim 2, wherein the preset bit rate for a horizontal band is in part the preset bit rate for the complete image, divided by the number of horizontal bands, in part a dynamic allocation of the preset bit rate for the complete image, dependent on the complexity of the band.

6 Process according to Claim 2, wherein the preset bit rate of a horizontal band is equal to:

$$D_i = \left(p \frac{X_i}{X} + (1-p) \frac{n}{N} \right) D$$

where :
Di is the bit rate of the horizontal band,
D is the bit rate for the global image,
Xi is the complexity of the horizontal band,
X is the total complexity of the image,
n is the number of panels per horizontal band,
N is the total number of panels in the image,

p is the percentage of bit rate assigned to dynamic allocation relative to the global bit rate.

5 7 Device for the video coding of high resolution images, an image being divided
into several horizontal bands and the bands into panels, the device comprising
a set of encoders of MPEG type, each encoder being dedicated to the coding of
a panel, wherein each encoder of one and the same band calculates a
quantization step per row of macroblocks as a function of the same information,
corresponding to the sum of the coding costs and of the output bit rates of the
10 set of encoders of this band and corresponding to a unique Video Buffering
Verifier (VBV) for the band, so as to obtain one and the same quantization step,
and in that the encoders perform a coding by dynamic allocation, the bit rate
allotted to the set of encoders of a band being calculated on the basis of the
complexity of coding the band relative to the complexity of coding the complete
15 image.

20 8 Device according to Claim 7, wherein the information is exchanged over the
multiplexing bus linking the encoders and used for the transmission of the
transport streams of the encoders.